Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Canceled)

2. (Currently Amended) A method specifically for detecting and/or quantifying a cytotoxic factor having a gliotoxic activity, associated with multiple sclerosis, in a biological sample, ~~comprising~~ comprising:

isolating a heterocomplex chosen from the heterocomplex GM2AP/GM2/MRP14 and mutated GM2AP/GM2/MRP14, in which mutated GM2AP corresponds to the sequence SEQ ID No. 2, from said biological sample;

wherein:

the heterocomplex is isolated by means of at least one antibody that binds specifically to the heterocomplex, and

the cytotoxic factor is detected and/or quantified by demonstrating the formation of a complex consisting of the heterocomplex and the antibody.

3. (Canceled)

4. (Previously Presented) The method as claimed in claim 2, according to which the heterocomplex is isolated by means of at least two antibodies that bind specifically to the heterocomplex, and said cytotoxic factor is detected and/or quantified by demonstrating the formation of a complex consisting of the heterocomplex and the two antibodies.

5. (Canceled)

6. (Previously Presented) The method as claimed in claim 4, according to which the heterocomplex is isolated by means of at least two antibodies, at least one of which binds specifically to GM2AP or mutated GM2AP of the heterocomplex, and at least the other of which binds specifically to MRP14 of the heterocomplex, and said cytotoxic factor is

detected and/or quantified by demonstrating the formation of a complex consisting of the heterocomplex and the two antibodies.

7. (Original) The method as claimed in claim 6, according to which at least one of said antibodies is a capture antibody and at least the other said antibody is a detection antibody.

8. (Previously Presented) The method as claimed in claim 2, according to which the biological sample is subjected to a prior treatment comprising:

digesting the proteins of the sample with proteinase K,

inactivating the proteinase K, and

neutralizing the pH.

9. (Previously Presented) The method as claimed in claim 8, wherein inactivating the proteinase K is carried out by precipitation with trichloroacetic acid, and wherein neutralizing the pH is carried out by the addition of a tris-maleate buffer.

10. (Previously Presented) The method as claimed in claim 2, in which the biological sample is selected from the group consisting of serum, plasma, urine and cerebrospinal fluid.

11. (Withdrawn) A composition for detecting and/or quantifying a cytotoxic factor associated with multiple sclerosis, said cytotoxic factor being chosen from the heterocomplex GM2AP/GM2/MRP14 and mutated GM2AP/GM2/MRP14 in which mutated GM2AP corresponds to the sequence SEQ ID No. 2, wherein the composition comprises at least one antibody that binds specifically to the heterocomplex.

12. (Withdrawn) The composition as claimed in claim 11, comprising at least two antibodies that bind specifically to the heterocomplex.

13. (Withdrawn) A reaction mixture for detecting and/or quantifying a cytotoxic factor associated with multiple sclerosis, said cytotoxic factor being chosen from the

heterocomplex GM2AP/GM2/MRP14 and mutated GM2AP/GM2/MRP14 in which mutated GM2AP corresponds to the sequence SEQ ID No. 2, wherein the reaction mixture comprises at least two antibodies, at least one of which binds specifically to GM2AP or mutated GM2AP of the heterocomplex, and at least the other of which binds specifically to MRP14 of the heterocomplex.

14. (Withdrawn) The reaction mixture as claimed in claim 13, wherein at least one of said antibodies is a capture antibody and at least the other of said antibodies is a detection antibody.

15. (Withdrawn) A complex comprising the heterocomplex GM2AP/GM2/MRP14 or mutated GM2AP/GM2/MRP14, said heterocomplex being bound to at least two antibodies, at least one of the antibodies of which is specific for GM2AP or for mutated GM2AP, and at least the other antibody of which is specific for MRP14.

16. (New) A method specifically for detecting and/or quantifying a cytotoxic factor having a gliotoxic activity, associated with multiple sclerosis, in a biological sample, the method comprising:

isolating a heterocomplex chosen from the heterocomplex GM2AP/GM2/MRP14 and mutated GM2AP/GM2/MRP14, in which mutated GM2AP corresponds to the sequence SEQ ID No. 2, from the biological sample;

wherein the biological sample is subjected to a prior treatment comprising:

digesting the proteins of the sample with proteinase K,

inactivating the proteinase K, and

neutralizing the pH.

17. (New) The method of claim 16, wherein:

inactivating the proteinase K is carried out by precipitation with trichloroacetic acid, and

neutralizing the pH is carried out by the addition of a tris-maleate buffer.

18. (New) The method of claim 16, wherein:

the heterocomplex is isolated by means of at least one antibody that binds specifically to the heterocomplex, and

the cytotoxic factor is detected and/or quantified by demonstrating the formation of a complex consisting of the heterocomplex and the antibody.

19. (New) The method of claim 16, wherein:

the heterocomplex is isolated by means of at least two antibodies that bind specifically to the heterocomplex, and

the cytotoxic factor is detected and/or quantified by demonstrating the formation of a complex consisting of the heterocomplex and the two antibodies.

20. (New) The method of claim 18, wherein:

the heterocomplex is isolated by means of at least two antibodies, at least one of which binds specifically to GM2AP or mutated GM2AP of the heterocomplex, and at least the other of which binds specifically to MRP14 of the heterocomplex, and

the cytotoxic factor is detected and/or quantified by demonstrating the formation of a complex consisting of the heterocomplex and the two antibodies.

21. (New) The method of claim 19, wherein at least one of the antibodies is a capture antibody and at least the other antibody is a detection antibody.

22. (New) The method as claimed in claim 16, wherein the biological sample is selected from the group consisting of serum, plasma, urine, and cerebrospinal fluid.